

IIT Mandi
Proposal for a New Course

Course Number	: HS 523
Course Name	: Decision-Making for Social Change
Credits	: 3-0-0-3
Prerequisites	: None
Intended for	: M.A. Development Studies/M.S./Ph.D./B. Tech. students
Distribution	: Discipline Elective for M.A. Development Studies / HSS Free Elective for B. Tech. students / Free Elective for other students
Semester	: odd/even

1. Preamble:

Developmental problems such as improving healthcare, conserving energy, providing universal education, and reducing global poverty require people to make decisions that cause social change. Such decisions need to be free from biases and heuristics and enable us to maximize utility. Thus, making good decisions for social change requires one to be aware of several pitfalls, which are likely to affect our decisions. This elective course will compliment other courses in the MA development studies program by exposing students to several decision pitfalls, which would help them improve decision-making in the real world. Topics in this course would enable students to understand the characteristics of good decision-making. Topics include mental models and system thinking; framing; decision making under risk; psychological biases that adversely affect people's decisions; and, methods for influencing individuals' and group's behavior, ranging from incentives and penalties to "nudges". This course will help students in overcome decision pitfalls that are likely to hinder sustainable development.

2. Course Modules with Quantitative Hours:

Module 1: Mental Models, System Thinking, and Probability Judgments (6 hours)

Introduction to system thinking, introduction to mental models, confirmation bias, identifying and improving mental models, linear models of judgement, fast-and-frugal heuristics, representativeness heuristic, availability heuristic, support theory, judgment of condition probability, anchoring-and-adjustments in judgements.

Module 2: Decision-making under Risk and Cognitive Biases (6 hours)

Expected-utility theory, prospect theory, framing and framing effect, decisions under uncertainty, endowment effect, status-quo bias, omission bias, sunk-cost effect, single-action bias, finite pool of worry, fundamental computational bias, single action bias, intuitive versus reflective judgements.

Module 3: Judgments involving Time and Group Decision Making (6 hours)

Theory of time preference, reasons for time preferences, inter-temporal choices, hyperbolic discounting, information sharing in groups, group polarization, group think, techniques for improving group decision-making: brainstorming, decision rules, systematic decision procedures, leadership.

Module 4: Dynamic and Naturalistic Decision Making (6 hours)

Use of microworld games, feedback, feedback delays, instance-based learning, individual differences in DDM, nature of naturalistic decision making, image theory, recognition-primed decision-making.

Module 5: Perception of Risk (6 hours)

Revealed preference approach to risk, risk dimensions, factors underlying risk dimensions, affective influence on risk, social amplification of risk, influence of personality on risk, influence of gender on risk, influence of race on risk, expert versus lay perception of risk, risk communication.

Module 6: Optimism, Confidence, and Nudges (6 hours)

Overconfidence, calibration curves, cross-cultural differences, case study on investment behavior, introduction to nudges, nudging over time, influence, nudging in the real world.

Module 7: Social Dilemmas and Environmental Decision Making (6 hours)

Introduction to social dilemmas, prisoner's dilemma, tragedy of commons, public goods, factors affecting social dilemmas, environmental biases – reliance on correlation heuristics and violation of mass balance, factors affecting correlation heuristic and violation of mass balance (backgrounds, type of feedback).

3. Textbooks:

Hardman, D., & Hardman, D. K. (2009). *Judgment and decision making: Psychological perspectives* (Vol. 11). John Wiley & Sons.

Kim, N. (2017). *Judgment and Decision-making: In the Lab and the World*. Macmillan International Higher Education.

4. Reference:

Bazerman, M.H. and Moore, D.A. (2008). *Judgment in Managerial Decision Making, 7th ed.* New York: Wiley.

Fischhoff, B. (2012). *Judgment and Decision Making*. Routledge

Hastie, R., & Dawes, R. M. (2010). *Rational choice in an uncertain world: The psychology of judgment and decision making*. Sage.

Plous, S. (1993). *The psychology of judgment and decision making*. McGraw-Hill Book Company.

Shome, D., Marx, S., Appelt, K., Arora, P., Balstad, R., Broad, K., et al. (2009). *The psychology of climate change communication: a guide for scientists, journalists, educators,*

political aides, and the interested public. New York: Center for Research on Environmental Decisions.

5. Similarity Content Declaration with Existing Courses

S.N.	Course Code	Similarity Content	Approx. % of Content
1.	HS 616	Certain topics in decision-making under risk and uncertainty and biases	14%
2.	EN 504	Certain topics in biases	10%

6. Justification for new course proposal if cumulative similarity content is > 30%: N.A.

Approvals: